In the Claims

Applicant has submitted a new complete claim set showing marked up claims with insertions indicated by underlining and deletions indicated by strikeouts and/or double bracketing.

Please amend pending claims 7, 12 and 13 as noted below.

Please add new claim 27.

1. (Previously Amended) A method of detecting the presence of detergent- or urea-insoluble amyloid-like fibrils or protein aggregates in a sample on a filter comprising the following steps:

(a) contacting said filter with material of a sample suspected to comprise said fibrils or aggregates which has been previously treated with detergent or urea to solubilize the sample and filtering said sample to capture said detergent or urea insoluble amyloid-like fibrils or protein aggregates; and

(b) detecting whether said fibrils or aggregates are retained on said filter.

2. (Original) The method of claim 1 wherein said amyloid-like fibrils or protein aggregates are indicative of a disease.

3. (Original) The method of claim 2 wherein said disease is a human disease.

4. (Original) The method of claim 2 or 3 wherein said disease is associated with a polyglutamine expansion.

5. (Previously Amended) The method of any one of claims 2 to 3 wherein said disease is Huntington's disease, spinal and bulbar muscular atrophy, dentarorubral pallidoluysian atrophy, spinocerebellar ataxia type-1, -2, -3, -6 or –7, Alzheimer disease, bovine spongiform encephalopathy (BSE), primary systemic amyloidosis, secondary systemic amyloidosis, senile systemic amyloidosis, familial amyloid polyneuropathy I, hereditary cerebral amyloid angiopathy, hemodialysis-related amyloidosis, familial amyloid polyneuropathy III, Finnish hereditary systemic amyloidosis, type II diabetes, medullary carcinoma of the thyroid,

spongiform encephalopathies: Kuru, Gerstmann-Sträussler-Scheinker syndrome (GSS), familial insomnia, scrapie, atrial amyloidosis, hereditary non-neuropathic systemic amyloidosis, injection-localized amyloidosis, hereditary renal amyloidosis, or Parkinson's disease.

6. (Previously Amended) The method of any one of claims 1 to 3 wherein said filter has a low capacity for protein adsorption.

7. (Currently Amended) The method of claim 6 wherein said ~~material~~ filter with low protein adsorption is cellulose acetate.

8. (Previously Amended) The method of any one of claims 1 to 3 and 7 wherein, prior to step (b), the following step is carried out: (b') washing said filter so as to remove detergent- or urea-soluble material of the sample.

9. (Previously Amended) The method of any one of claims 1 to 3 and 7 wherein detergent- or urea-soluble material of the sample is simultaneously with or subsequent to the contacting of said filter with material of the sample in step (a), sucked through said filter.

10. (Previously Amended) The method of any one of claims 1 to 3 and 7 wherein detection in step (b) is effected by an antibody, or peptide or polypeptide, preferably a tag or an enzyme, or a fragment or derivative thereof or a chemical reagent that specifically binds to said fibrils or aggregates.

11. (Previously Amended) The method of any one of claims 1 to 3 and 7 wherein detection in step (b) is effected by electron microscopy, electron scanning microscopy, fluorescence or chemiluminescence.

12. (Currently Amended) The method of any one of claims 1, 2, and 7 wherein said material of the sample is derived from tissues or cells of bacteria, yeast, fungi, plants, insects~~,~~ or animals~~, preferably mammals, humans, from a transgenic animal or a transgenic plant~~.

13. (Currently Amended) The method of any one of claims 1 to 3 and 7 wherein said material of the sample comprises a fusion protein comprising a peptide or polypeptide that enhances solubility or prevents aggregation of said fusion protein, an amyloidogenic peptide or polypeptide ~~that has the ability to self-assemble into amyloid-like fibrils or protein aggregates when released from said fusion protein~~ and a cleavable site that separates the above-mentioned components of the fusion protein, the method further comprising the following steps prior to step (a):

(a') incubating said fusion protein in the presence of a suspected inhibitor of amyloid-like fibril or protein aggregate formation; and

(a") simultaneously with or after step (a'), further incubating with a compound that induces cleavage at said cleavage site.

14. (Original) The method of claim 13 wherein said cleavable site is an enzymatically cleavable site or a chemically cleavable site or a site cleavable by intein self-cleavage in the presence of thiols.

15. (Previously Amended) The method of claim 14 further comprising, prior to step (b) and after step (a"):

(a"') incubation with an inhibitor of said compound that induces cleavage.

16. (Previously Amended) The method of claim 14 wherein said amyloidogenic peptide or polypeptide comprises a polyglutamine expansion.

17. (Previously Amended) The method of claim 7 wherein said polyglutamine expansion comprises at least 35, preferably at least 41, more preferably at least 48 and most preferably at least 51 glutamines.

18. (Previously Amended) The method of any one of claims 1 to 3 and 7 wherein said contacting is effected by dotting, spotting or pipetting said material of the sample onto said filter.

19. (Previously Amended) The method of any one of claims 1 to 3 and 7 wherein said filter is a filter membrane.

20. (Previously Amended) The method of any one of claims1 to 3, and 7 wherein said detergent is Sodium Dodecyl Sulphate (SDS) or t-octylphenoxypolyethoxyethanol (TRITON X-100™).

21. (Withdrawn) An inhibitor of amyloid-like fibril or protein aggregate formation identified by the method of claim 26.

22. (Withdrawn) The inhibitor of claim 21 which is an antibody or a derivative or functional fragment thereof, a peptide or a chemical reagent.

23. (Withdrawn) A pharmaceutical composition comprising the inhibitor of claim 22 and a pharmaceutically acceptable carrier or diluent.

24. (Withdrawn) A diagnostic composition comprising

(i) the fusion protein as recited in claim 13.

25. (Withdrawn) The diagnostic composition of claim 24 further comprising

(ii) the filter for filtering the fusion protein as recited in claim 1 optionally or preferably contained in a microtiter plate; and optionally

(iii) the compound that induces cleavage as recited in claim 13; and optionally;

(iv) an inhibitor of said compound of (iii); and optionally

(v) suitable buffer solutions.

26. (Withdrawn) A method for identification of an inhibitor of amyloid-like fibrils or protein aggregate formation comprising the method according to claim 13 wherein the material of the sample is incubated in the presence and in the absence of the suspected inhibitor and the absence or the reduction of the detection of fibrils or protein aggregates in the material of sample

incubated in the presence of the inhibitor in step (b) is indicative of the efficiency of the inhibitor.

27. (New) The method of claim 12 wherein said tissues or cells are from mammals, humans, a transgenic animal or a transgenic plant.